Storm Water Pollution Prevention Plan for Sierra Boat Company

November 15, 2000

STORM WATER POLLUTION PREVENTION PLAN

FOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT

FOR

DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH INDUSTRIAL ACTIVITY AND MAINTENANCE DREDGING AT MARINAS

FOR

SIERRA BOAT COMPANY
5146 NORTH LAKE BLVD., CARNELIAN BAY, CA 96140
APN: 115-030-050

INTRODUCTION

The California Regional Water Quality Control Board (RWQCB) – Lahontan Region has recently developed a National Pollutant Discharge Elimination System (NPDES) General Permit for discharges of storm water run-off associated with industrial activity and maintenance dredging at marinas at Lake Tahoe. The General Permit combines requirements from the NPDES General Industrial Activities Storm Water Permit and the individual Waste Discharge Requirements in order to decrease costs and complexities associated with complying with two similar permits and their monitoring and reporting requirements. Regulations pursuant to this General Permit will manage potential pollutant discharges at the marina including storm water run-off, waste from maintenance activities, vessel sewage, bilge water wastes and pollutants associated with maintenance dredging.

The Storm Water Pollution Prevention Program (SWPPP) is a site-specific document developed for each marina in the Lake Tahoe Basin and is designed to comply with Federal requirements to implement BMPs. In accordance with this document, the Sierra Boat Co. is required to install Best Management Practices (BMPs) to ensure that effluent limits and water quality objectives outlined by the Basin Plan are met with respect to fuel, oil, and sewage and that impacts associated with maintenance dredging are prevented or minimized.

The SWPPP shall be certified in accordance with the signatory requirements of Section 9 of the Standard Provisions as Attachment A in this document. It shall be revised whenever appropriate and readily available for review by facility employees or Regional Board inspectors.

OBJECTIVES

The SWPPP shall be developed and amended, when necessary, to meet the following objectives:

1. Identify and evaluate sources of pollutants associated with industrial activities being conducted at the facility that may affect the quality of storm water discharges and prevent non-storm water discharges from the facility

2. Identify and implement site-specific BMPs to reduce or prevent pollutants associated with industrial activities in storm water discharges and non-storm water discharges.

Appropriate BMPs include both structural and non-structural pollution prevention measures. Structural BMPs include treatment measures, run-off controls and overhead coverage. Non-structural BMPs include activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures.

POLLUTION PREVENTION TEAM

The pollution prevention team for Sierra Boat Co. shall consist of Andrea Buxton, Jan Brisco, Herb Hall, Pat Bagan, and Ken Foster.

1. Jan Brisco and Andrea Buxton will be responsible for researching all information required by the General Permit, writing the SWPPP, and assisting the marina operator in implementation of any necessary BMP's and monitoring and reporting activities.

2. Herb Hall and Pat Bagan are the marina operators and will be responsible for implementation of any necessary BMP's and conducting monitoring and reporting activities.

There are no existing facility plans that contain storm water pollutant control measures. A Hazardous Materials Inventory is on file with the Placer County Department of Environmental Health.

SITE MAP

A site map for the Sierra Boat Co. property is included as Attachment B in this document.

LIST OF SIGNIFICANT MATERIALS

A list of significant materials handled and stored at the site is included as Attachment C in this document and includes storage locations, quantities, and frequencies of use.

DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

The following is a description of the industrial activities of Sierra Boat Co. that are associated with potential pollutants. It includes potential pollutant sources that could be discharged in storm water discharges or non-storm water discharges and the BMPs implemented onsite to prevent pollutants from entering surface waters or stormwater. A summary of all areas of industrial activities and potential pollutant sources is included as Attachment D in this document.

The season of operation at Sierra Boat Company extends from May 31 through November 1 each year. All industrial activities described below are only associated with the above dates of operation.

INDUSTRIAL PROCESSES

1. Fueling
    a. Locations of activity
        - On fuel dock at two fuel pumps
        - In marina at one fuel pump
    b. Pollutant type
        - Unleaded gasoline (benzene, toluene, ethylbenzene, xylenes and other petroleum hydrocarbons)
    c. Pollutant characteristics
        - Colorless, flammable liquid
        - Slightly soluble (0.18g/100 mL)
        - Odor detected at 12 ppm
        - Benzene is a know carcinogen
    d. Potential pollutant sources
        - Leaks or spills near pumping stations
        - Overflow from boat gas tanks while fueling
        - Rainfall running off fueling area and rainfall running into and off fueling area
    e. Quantity
        - Less than one gallon per incident
        - Incidents expected to occur very infrequently

f. BMPs
    - Sorbent booms and pads located in storage bin on fuel dock for quick absorption of spilled fuel
    - Sorbent booms and pads located in storage shed in maintenance yard for quick absorption of spilled fuel
    - Employees trained in proper fueling, clean-up and spill response techniques
    - Fueling area inspected regularly to detect problems before they occur
    - Automatic shut-off valves at pumps
    - Waste fuel to 55 gallon waste fuel drum removed by Reno Drain Oil.

2. Boat Washing
    a. Location of activity
        - Maintenance Yard (outside boathouse)
    b. Pollutant type
        - Oily residues
        - Algae
    c. Pollutant characteristics
        - Petroleum hydrocarbons
        - Organic compounds (nutrients)
    d. Pollutant source
        - Films on outsides of boats
    e. Quantity
        - Low concentrations of both pollutants
    f. BMPs
        - Slotted drains down gradient of maintenance yard leading to sand-oil separator to collect non-storm water run-off (hose water) generated during washing
        - Only biodegradable soap used

3. Boat Cleaning
    a. Location of activity
        - Maintenance shop
    b. Pollutant type
        - Methanol
        - 325 Solvent
        - Acetone
    c. Pollutant characteristics
        - Cleaning solvents (may contain tetrachloroethylene (PERC), tetrachloroethane, trichloroethylene (TCE), methylene chloride)
    d. Pollutant source
        - Spills while performing activity

- Rags used to apply cleaning solvents
- Surfaces of boats wiped down with solvents

e. Quantity
- 1 quart used solvent per event
- Methanol stored in 55 gallon drum
- 325 Solvent stored in 55 gallon drum
- Acetone stored in 5 gallon container
- Activity occurs weekly

f. BMPs
- All cleaning activities occur inside shop
- All waste solvents disposed of in 55 gallon paint thinner waste drum disposed of by Reno Drain Oil, 11970 I80 East, Sparks, NV 89431, 775-342-0351
- Sorbent pads and booms available nearby to contain and wipe up any spills
- Rags deposited in fireproof can and removed once per week by Armark, 1335 Greg St. Ste. 106, Sparks, NV 89431, 775-331-1221

4. Bilge Draining
   a. Location of activity
      - Marina – clean bilges only
      - Maintenance yard – contaminated bilges
   b. Pollutant type
      - Oily residues
   c. Pollutant characteristics
      - Petroleum hydrocarbons
   d. Pollutant source
      - Contaminated bilge water
   e. Quantity
      - Approximately 10 gallons of contaminated water with low concentrations of petroleum hydrocarbons
   f. BMPs
      - All bilge water drained into buckets and poured into 55 gallon waste water drum in storage shed and disposed of by Reno Drain Oil
      - Imbiber filter to sand oil separator collects any bilge water spillage
      - Sorbent pads placed between drainage buckets and lake

5. Varnishing / Painting
   a. Location of activity
      - Varnish / paint shop
   b. Pollutant type
      - Varnish

- Paint
- Methanol
- Lacquer Thinner

c. Pollutant characteristics
   - May contain heavy metals
   - May contain PERC, tetrachloroethane, TCE, methylene chloride

d. Potential pollutant source
   - Spills while performing activity
   - Dirty paintbrushes

e. Quantity
   - 3 gallons varnish stored
   - Less than 30 gallons paint stored
   - Varnishing occurs daily
   - Painting occurs once a month
   - Approximately 1 to 2 quarts used per event
   - 55 gallon drums contain methanol and lacquer thinner

f. BMPs
   - All varnishing / painting and varnish / paint stripping done in varnish / paint shop
   - All varnishes / paints stored in fireproof cabinets in varnish shop
   - Methanol / lacquer thinner stored in shops in 55 gallon drums
   - Extra varnish / paint dried in container before disposal
   - Brushes washed in Safety-Kleen unit
   - Saftey-Kleen solvents disposed of by Safety-Kleen
   - Waste methanol and lacquer thinner disposed of in 55 gallon waste paint thinner drum and disposed of by Reno Drain Oil

6. Oil Changes

a. Location of activity
   - In marina

b. Pollutant type
   - Waste oil
   - Waste filters
   - New oil

c. Pollutant characteristics
   - Petroleum hydrocarbons

d. Pollutant source
   - Withdrawal of oil from boat engines
   - Replacement of used oil with new oil

e. Quantity
   - 5 quarts waste oil

- 1 used oil filter
- 5 quarts new oil
- Activity occurs approximately one time per year for 250 boats

f. BMPs
- All oil pumped directly from engine into tightly sealed 2 gallon vacuum tank
- Vacuum tank pumped into 55 gallon waste oil drum
- Oil drained into 55 gallon waste oil drum and disposed of by Reno Drain Oil
- Oil filters drained of oil on rack into 55 gallon waste oil drum
- Oil filters placed in 30 gallon dry drum and disposed of by Reno Drain Oil
- New oil pumped from 55 gallon drum contained in secondary container

7. Engine Lubrication
   a. Location of activity
      - Engine shop
   b. Pollutant type
      - Gear lubricant
      - Cleaning solvents
   c. Pollutant characteristics
      - Petroleum hydrocarbons
      - Safety-Kleen solvent
   d. Pollutant source
      - Boat engines
      - Safety-Kleen unit
   e. Quantity
      - 2 quarts gear lubricant used per event
      - Activity occurs once a year on each of approximately 150 boats
      - Continuous stream of Safety-Kleen solvent cycled through unit
   f. BMPs
      - All engine maintenance done in engine shop
      - Sorbent towels in trays used to catch any overflow
      - All engine parts washed in self-contained Saftey-Kleen unit
      - Contaminated solvent removed by Saftey-Kleen

8. Welding
   a. Location of activity
      - Engine shop

b. Pollutant type
   - Acetylene
c. Pollutant characteristics
   - Flammable gas
d. Pollutant source
   - Blow torch fuel
e. Quantity
   - Approximately 1000 cubic centimeters stored
   - Welding occurs weekly
f. BMPs
   - Acetylene stored in appropriate pressurized metal tanks
   - Welding occurs in engine shop only

9. Sewage pumping
   a. Location of activity
      - Fuel dock
   b. Pollutant type
      - Raw sewage / human waste
   c. Pollutant characteristics
      - Nitrogen containing organic compounds
      - Other organics
      - Bacteria
   d. Pollutant source
      - Spills and leaks during pumping of on-board sewage tanks
   e. Quantity
      - Minimal - most boats stored at this marina do not have onboard toilets
   f. BMPs
      - Pump-out facility available to public
      - Pump inspected regularly for proper function
      - Sewage ultimately disposed to sewer system and treated by Truckee-Tahoe Sanitary District

MATERIAL HANDLING AND STORAGE AREAS

(See attachment C for quantities stored)

1. Engine Shops
   a. Location
      - Inside boathouse
   b. Types of pollutants handled
      - Petroleum hydrocarbons (oil, fuel, petroleum based solvents)

- Solvents (may contain PERC, tetrachloroethane, TCE, methylene chloride)
- Acetylene

c. Quantity handled
- 1-2 quarts per event (applies to all compounds)

d. Spill prevention / response procedures
- Sorbent pads used to contain and absorb any spills
- Safety-Kleen solvents limited to self-contained Safety-Kleen unit

2. Varnish / Paint shops
   a. Location
      - Inside boathouse
   b. Types of pollutants handled
      - Varnishes
      - Paints (may contain heavy metals)
      - Various cleaning solvents (may contain PERC, tetrachloroethane, TCE, methylene chloride)
      - Safety-Kleen solvent (petroleum based)
   c. Quantity handled
      - 1-2 quarts per event (applies to all compounds)
   d. Spill prevention / response procedures
      - Sorbent pads used to contain and absorb any spills
      - Safety-Kleen solvents limited to self-contained Safety-Kleen unit
      - All varnishes and paints stored in fireproof cabinets

3. Maintenance Yard
   a. Location
      - Directly outside of boathouse
   b. Types of pollutants handled
      - Petroleum hydrocarbons
   c. Quantity handled
      - Low concentrations in approximately 1 gallon of water
   d. Spill prevention / response procedures
      - Buckets placed under bilge drain to collect contaminated water
      - Sorbent pads used to contain any spilled water from bilge draining

4. Waste Storage Shed
   a. Location
      - Outside boathouse on southwest corner of maintenance yard
   b. Types of pollutants handled

- Petroleum hydrocarbons

c. Quantity handled
   - Up to several gallons per event

d. Spill prevention / response procedures
   - Sorbent pads used to contain any spills
   - Secondary container on new oil drum
   - Area kept clean and neat
   - Funnels used to pour wastes into 55 gallon drums to avoid spillage
   - Storage shed well sealed and surrounded by gravel

5. Battery Shed
   a. Location
      - Maintenance yard
   b. Types of pollutants handled
      - Battery acids
   c. Quantity stored
      - 400 used batteries
      - 20 new batteries during operating season, none over winter
   d. Spill prevention / response procedures
      - Batteries kept in detached shed, away from flammables
      - Used batteries disposed of by Interstate Battery, 333 South Carson Meadows Dr., Carson City, NV 89701, (775)883-6576
6. Marina
   a. Location
      - On Lake Tahoe
   b. Types of pollutants handled
      - Petroleum hydrocarbons
   c. Quantity handled
      - ±5 quarts oil during oil changes
      - ±10 gallons fuel at fuel dock
   d. Spill prevention / response procedures
      - Sorbent pads and rags to contain and wipe up any spills

DUST AND PARTICULATE GENERATING ACTIVITIES

1. Sanding
   a. Location of activity
      - Varnish shop
   b. Pollutant type
      - Particles of paint/varnish/lacquer/fiberglass/wood
   c. Pollutant characteristics
      - Fine particulates (may contain heavy metals)